

IN THE DRAWINGS

Figure 1 has been amended by adding “Prior Art” under Fig. 1, as indicated in red in the attached annotated marked-up drawing. A replacement sheet of Figure 1 is also attached.

REMARKS

The remaining claims talk about using an aged slurry to chemical mechanical polish a metal layer. And, in particular, the slurry that is used is an aged slurry. The Applicants have found that using aged slurries to chemical mechanical polish metal layers, such as tantalum containing layers, results in less defects.

The prior art reference makes exactly the opposite finding. By including a methyl cellulose material, the cited reference is able to get good results with respect to scratching, even when the slurry has been aged for as much as twelve weeks. However, as pointed out at column 1, lines 29-34, precipitated silicas are known and aged silica slurries have a tendency to scratch the surface being polished. Further, it is pointed out that “the age of the silica slurry has a definite impact on the scratching tendency, an aged slurry having a much greater tendency to produce scratches than a freshly prepared one.” Tredinnick at column 1, lines 29-35.

With respect to metal layers, the Applicants have observed exactly the opposite effect. In other words, aging the slurry used to polish metal layers reduces scratching.

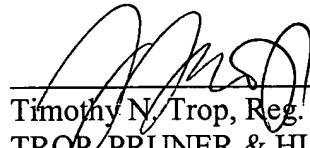
It seems hard to contend that the cited reference can be combined, in an obviousness rejection, when it directly teaches away from the claimed invention. In other words, even if it is known to polish both metals and non-metals, it would seem crazy to polish metals with aged slurries, given the teaching of the reference which suggests that aged slurries increase scratching.

As amended, the remaining independent claims call for using an aged slurry to reduce defects when chemical mechanical polishing a metal. The cited reference does not use an aged slurry to reduce defects, it uses methyl cellulose to overcome what it considers to be the adverse consequences of using aged slurries with respect to scratching. Thus, in the case of polishing metals, the effect that is achieved is exactly the opposite of the claimed invention. Therefore, the cited reference could not render the claimed invention obvious.

As a result, reconsideration would be appropriate.

Respectfully submitted,

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ANNOTATED SHEET SHOWING CHANGES

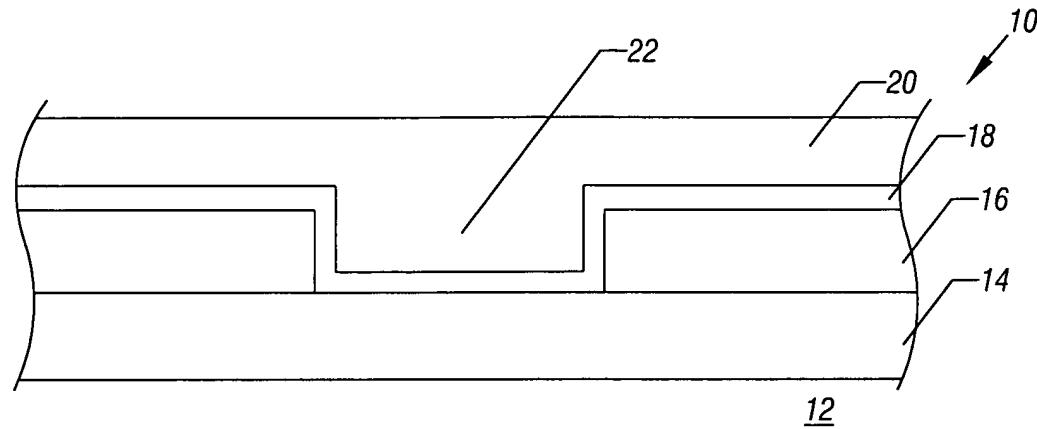


FIG. 1
(PRIOR ART)

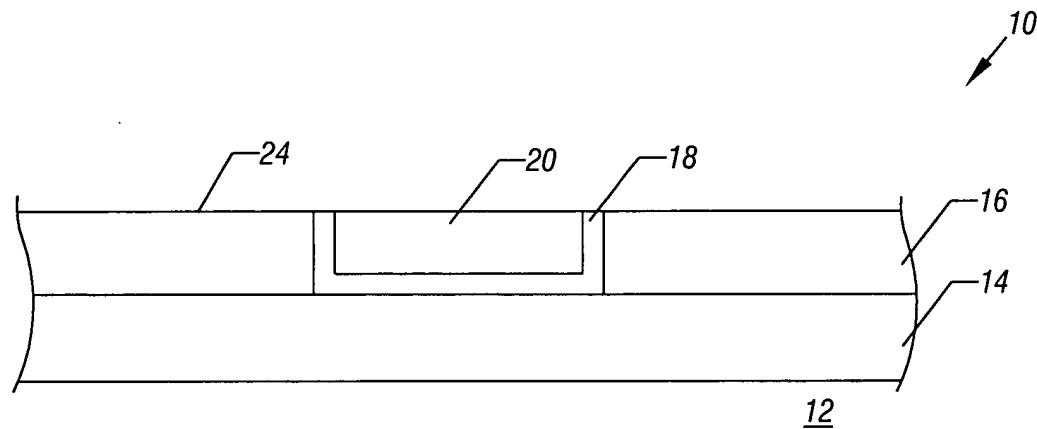


FIG. 2